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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,654	04/14/2004	Yoshio Terada	Q81096	4963

65565 7590 12/19/2007
SUGHRUE-265550
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EXAMINER	
DOUYON, LORNA M	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
12/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/823,654	Applicant(s) TERADA ET AL.	
	Examiner Lorna M. Douyon	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8,9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 9, 2007 has been entered.

2. Claims 1-5, 8-9, 11-16 are pending. Claims 6-7 and 10 are cancelled. Claims 11-16 are withdrawn from consideration as being drawn to a nonelected invention.

3. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuura et al. (US Patent No. 6,066,404), hereinafter "Suzuura".

Suzuura teaches a packaging clean film (see col. 1, lines 6-12) which comprises a base structure having heat-sealing layer forming its inside surface and a protective layer laminated to the base structure so as to be removable (see col.1, lines 41-45). In Example 1, Suzuura teaches a laminated film comprising MDPE/LDPE (medium-density polyethylene film/low-density polyethylene resin) composite film, the outer protective layer 5, the Ony (nylon) film is the base layer 2 (equivalent to the cleaning layer which has no adhesive strength), the LDPE film is the heat-sealing layer 3, and the CPP (polypropylene) film is the inner protective layer 6 (see col. 8, lines 8-38; Figure 2). Reference numeral 6 is equivalent to the support layer and carrying member, 3 is

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equivalent to adhesive layer, 2 is equivalent to cleaning layer and 5 is equivalent to the releasable protective film of the present claims. In another embodiment, Suzuura teaches a laminated sheet comprising base layer 51, the heat-sealing layer 52, the first protective layer 53 and the second protective layer 31, and the sheets are made of known resins, one selection of which is polyimide resins (see col. 20, lines 26-51; Figure 18). In Figure 4, Suzuura shows a further example wherein a packaging film 1 has a base structure 4 consisting of a base layer 2 and a heat-sealing layer 3, a second outer protective layer 5b laminated to the outside surface of the base structure 4, a first outer protective layer 5a laminated to the outside surface of the second outer protective layer 5b, and an inner protective layer 6 laminated to the inside surface of the base structure 4 (see col. 6, lines 35-43). In this figure, 5a corresponds to the protective film, 5b corresponds to the cleaning layer, 2 corresponds to the support and 3 corresponds to the adhesive layer. Hence Figure 4 is construed to read on the limitations of instant claim 4. Suzuura, however, fails to teach (1) the relative intensities of the recited fragments ions in values as those recited, i.e. 0.1 or less, and the use of the laminated film as a cleaning sheet, and (2) the tensile modulus and adhesive strength of the cleaning layer as those recited.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the relative intensities of the recited fragments ions in the laminated sheet of Suzuura to be within those recited because the films of Suzuura do not have any silicone components to yield the recited fragments ions. Even though Suzuura does not teach a cleaning sheet

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use of his composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the tensile modulus and adhesive strength of the cleaning layer or base layer of Suzuura to be within those recited because similar sheets and layers have been utilized.

4. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namikawa et al. (WO 01/94036), hereinafter "Namikawa".

Namikawa teaches a cleaning sheet for cleaning foreign matters away from the interior of the substrate processing equipment, and the cleaning sheet includes a cleaning layer having layer substantially no tackiness and having a tensile modulus of not lower than 0.98 N/mm^2 (0.98 MPa), preferably from 0.98 to $4,900 \text{ N/mm}^2$ as determined according to JIS K7127 (see abstract; page 4, lines 3-6). The cleaning layer exhibits a 180° peel adhesion of not greater than 0.20 N/10 mm , preferably from 0.01 to 0.1 N/10 mm with respect to silicon wafer (see page 4, lines 13-15). The cleaning layer is not specifically limited in its material and structure so far as it has substantially no tackiness and one example, among a few, is polyimide (see page 5, lines 12-19). The cleaning sheet further comprises a base material for supporting a cleaning layer on one side thereof; and an ordinary adhesive layer provided on the other side of said base material (see claim 3). An ordinary adhesive (e.g., acrylic adhesive, rubber-based

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adhesive) may be used (see page 10, lines 6-13). Namikawa, however, fails to teach the relative intensities of the recited fragments ions in values as those recited, i.e. 0.1 or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the relative intensities of the recited fragments ions in the cleaning sheet of Namikawa to be within those recited because the cleaning sheet of Namikawa uses ordinary adhesive such as acrylic adhesive which does not have any silicone components to yield the recited fragments ions.

Response to Arguments

5. Applicants' arguments filed October 9, 2007 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based upon Suzuura, Applicants argue that Suzuura does not disclose the cleaning layer of claims 1 and 8, and while the Examiner considers the base layer as corresponding to the cleaning layer, Suzuura does not disclose, teach or suggest that the base layer has a tensile modulus of 10 MPa or more as determined according to JIS K7127 and exhibits an adhesive strength of 0.2N/10 mm width or less when peeled off a silicon wafer at an angle of 180° as determined according to JIS Z0237.

The Examiner respectfully disagrees with the above argument because, as stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the tensile modulus and adhesive

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strength of the cleaning layer or base layer of Suzuura to be within those recited because similar sheets and layers have been utilized. Polyimide resin is listed as one of the materials for the base layer as disclosed in col. 20, lines 32-49, hence Suzuura suggests its use, and one skilled in the art would reasonably expect its property to be within those recited.

Applicants also argue that Suzuura does not disclose the claimed structure of claim 4, that is, the adhesive layer is on the side of the support opposite to the side where the cleaning layer is formed. In contrast, in Example 1 of Suzuura, the heat-sealing layer is formed between the base layer 2 and the inner protective layer 6, which the Examiner considers to be the cleaning layer and the support, respectively.

The Examiner respectfully disagrees with the above arguments because, as stated above, Figure 4 reads on the limitations of claim 4. As stated above, in Figure 4, Suzuura shows a further example wherein a packaging film 1 has a base structure 4 consisting of a base layer 2 and a heat-sealing layer 3, a second outer protective layer 5b laminated to the outside surface of the base structure 4, a first outer protective layer 5a laminated to the outside surface of the second outer protective layer 5b, and an inner protective layer 6 laminated to the inside surface of the base structure 4 (see col. 6, lines 35-43). In this figure, 5a corresponds to the protective film, 5b corresponds to the cleaning layer, 2 corresponds to the support and 3 corresponds to the adhesive layer. Accordingly, the rejection based upon Suzuura is maintained.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference is considered cumulative to or less material than those discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M. Douyon/
Primary Examiner
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